

**ABSTRACT**

A system for increasing realized secure sockets layer (“SSL”) encryption and decryption connections is disclosed. The system combines monitoring of server load with adjustment of static SSL parameters to optimize a system of devices. The system monitors parameters of the servers that affect the ability of the servers to process SSL connections. An “SSL capacity” value for each server is calculated which represents the capability of that server to process SSL connections. This value is used to calculate an SSL threshold for that server, which is then applied to the SSL device to determine how many SSL connections the SSL device should process for that server. Since the connection threshold for an SSL device is a function of the device’s load and each server’s SSL capacity, and these values are dynamic, the connection threshold values are recalculated periodically to ensure increased SSL performance without impact to client response.